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The Economics of Regulatory Takings

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I. INTRODUCTION

When people think about the Fifth Amendment's Takings Clause, they usually think in terms of equity, often envisioning public works such as road construction. The instinctive reaction is that it would be unfair for the state to take the property for building a road without paying for that property.

Arguments favoring compensation for regulatory takings generally employ similar logic. If it is unfair for the government to take someone's whole house and lot without paying, it also is unfair to take away part of a back yard or some uses of the property without paying. A regulation prohibiting property owners from filling in wetlands, for example, effectively deprives property owners of the use of some of their property. If the government, representing the public, wants to take someone's property, it should pay, even if the taking is partial.[1]

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1. An influential work making this argument is RICHARD A. EPSTEIN, TAKINGS: PRIVATE PROPERTY AND THE POWER OF EMINENT DOMAIN (1985).

But why do we consider it inappropriate for government to take private property without paying? In at least some cases, regulation delivers large benefits to the public with only a small inconvenience to a few property owners. This is the basis for the argument against compensation for regulatory takings. Since these unregulated property owners would otherwise be free to pursue their own selfish interests at the public's expense, it seems fair that they, not the public, should be inconvenienced for the greater good.

This argument appears especially strong when applied to "externalities"—spillover effects that occur when private property owners fail to account for the effects of their actions on other people. Open public debate should allow elected leaders, regulators, and citizens to determine the most pressing externality problems and curtail property rights accordingly. The result produced by public debate is fair because all sides, including property owners, have equal rights to participate and have their interests represented. No one owes the property owners compensation; they have participated in an open public debate and lost. They should accept their losses as a contribution to the greater good, perhaps seeking solace in the fact that the government will sometimes call upon other property owners to make similar sacrifices.[2]

This second perspective has dominated most public policy debates when private property rights are at issue. Unfortunately, it ignores the fundamental role that property rights play in encouraging increased knowledge and coordination of economic activity. Externalities and property rights demonstrate why compensation for every form of government takings is necessary to enhance the quality of life associated with an advanced economy.

II. THE ECONOMICS OF PROPERTY RIGHTS

Regulatory takings cannot be justified in the absence of significant "externalities." Paradoxically, however, the best way to accomplish the "internalization" of externalities generally is *not* by government regulation but by ensuring clear property rights.

A. Externalities

The most controversial regulatory takings involve government actions designed to mitigate externalities.[3] An externality occurs when a person fails to consider the costs or benefits that the individual's actions create for other people. Conceptually, the presence or absence of externalities provides a clear

2. *See, e.g.*, Lynda Butler, *Private Land Use, Changing Public Values and Notions of Relativity*, *in* DEVELOPMENT EXPECTATIONS AND THE ZONING POWER: THE CONCEPT OF VESTED RIGHTS 9 (Richard Collins, ed. 1992).

3. *See, e.g.*, Lucas v. South Carolina Coastal Council, 112 S. Ct. 2886 (1992).

criterion for determining whether a proposed taking accomplishes a broad enough public purpose to justify government involvement. Externalities that affect a large segment of the population can reasonably be said to affect "the public." It is much harder to explain why the public has an interest in abrogating private property rights when spillover effects are not present, because the use of property affects only a limited number of directly interested parties.[4] Government's role in correcting externalities arises because significant "transaction costs" often are associated with mitigating externalities. Externalities that involve only a few interested parties likely will have low transaction costs, so there is no role for government.[5]

Air pollution and ugly neckties are examples of externalities.[6] Air pollution is an externality when a polluter fails to consider the damage that pollution imposes on other people. A coal-burning factory, for example, emits smoke and soot into the air. These pollutants come to rest on people's homes, laundry, and lung tissues. The true cost of producing the factory's goods includes not only the expense of materials, labor, and machinery, but also the cost that the pollution imposes on people in the surrounding neighborhood. The cost of production will be inaccurately low if the factory owner fails to calculate negative spillover costs. The factory can produce more output when the owner fails to account for the external costs. More pollution is generated, but the public is denied the opportunity to weigh the costs of production plus pollution against the value of the factory's output.

Ugly neckties might sound like a trivial example of an externality, but they help explain the concept. When selecting neckties, a person might think primarily of the tie's impact on others; another might consider only what appeals to that individual. The latter group might choose to wear neckties that evoke profound displeasure among coworkers, acquaintances, and casual passersby. Ugly ties create an externality to the extent that people wearing ugly ties ignore the impact on others. Of course, social pressures and informal sanctions exercise a restraint on one's choice of clothing. Theoretically, neckties are not nearly so ugly as they could be if no one cared what

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4. Epstein reaches a similar conclusion. *See* EPSTEIN, *supra* note 1, at 166-69. Epstein focuses on the economic theory of public goods, rather than the economic theory of externalities. The concepts of public goods and externalities are closely related. The public good theory has two basic propositions. First, one person's consumption does not diminish the amount available for others. Second, it is expensive to exclude nonpayers from consuming the good. National defense and neighborhood police patrols are classic examples of public goods. Alleviating negative externalities or encouraging positive externalities often satisfies the economist's definition of a public good. For more detailed discussion of the externalities and public goods, see TYLER COWEN, THE THEORY OF MARKET FAILURE (1988).

5. *See infra* Section III.

6. Externalities can be positive or negative; a person can impose spillover costs or confer spillover benefits on others. This article focuses on spillover costs because the most interesting and controversial regulatory issues involve external costs rather than external benefits.

others thought about their clothing. Social pressure partially explains why no one has seriously proposed regulating neckties as stringently as automobile exhaust.[7] The necktie example illustrates that even though one person's failure to consider spillover effects may generate an externality, government need not automatically abridge that individual's property rights to correct the problem.

From an economic perspective, these externalities are a problem not because air pollution is unhealthful or ugly ties are tasteless but because they impose burdens on people who were not given the opportunity to weigh the costs against any accompanying benefits. As a result, industry produces too much of the goods and services that generate pollution, and fashion designers produce ties that are too loud or too wide. Manufacturers who consider the desires of people breathing the air or looking at ugly ties would reduce these forms of pollution.

Manufacturers probably would not eliminate pollution, though. Society must allow a certain amount of pollution in order to maintain its standard of living. For example, many people who consider themselves environmentally conscious are willing to tolerate some carbon monoxide from automobiles because some automobile transportation is worth the resulting carbon monoxide emissions. Most environmentalists seek only to reduce automobile use, not eliminate it. Even the few extremists who would like to ban automobiles would have to rely on other forms of transportation that generate some pollution. Returning to riding horses, for instance, would substitute one form of pollution for another. The economic approach does not focus on eliminating pollution but on permitting only the amount that people are willing to bear to enjoy various goods and services.

Many environmental and land-use regulations have been justified as an attempt to hold property owners accountable for externalities. However, it is not clear whether the regulations induce people to evaluate external costs accurately and make appropriate output choices. For example, the levels of some air emissions still may be too high given the value of the goods whose production involves emissions. Regulation also may force industry to cut production too much; people might be willing to tolerate more emissions in order to have more of certain products or services. The economic approach to externalities recognizes that people make incremental tradeoffs to obtain more of good things and less of bad things. Any policy advocacy couched in absolutes, such as "zero emissions" or "no smoking in any public place," ignores the fundamental fact that people are willing to make these incremental tradeoffs.

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7. The invasiveness of government intervention and difficulty in formulating any intelligible regulatory standard are additional important considerations in the necktie case—but these factors also are present in regulating air pollution.

B. Externalities and Public Policy

The question then becomes, "What is the most effective way to ensure that people bear externalities only when they get enough other things in return?" Most public policy discussions assume that the government offers the only effective means of answering this question. Politicians and regulators get the job of deciding how much air pollution is too much or how wide ties can grow before they are too wide. They then craft regulations or tax schemes that outlaw or reduce the offending behavior. As the elected representatives of the people, politicians are assumed to have the moral legitimacy and the knowledge of popular preferences necessary to make these decisions intelligently.

Even some economic discussions implicitly adopt these premises with a few minor modifications. The modifications naturally amplify the economist's role in the policymaking process. The economist's job is to help policymakers accurately assess the citizenry's true desires so that the government can determine the "optimal" amount of pollution, poor taste in clothing, or other externality that should be permitted. Surveys and statistical studies attempt to place dollar values on clean air, beautiful views, and a host of other good things. These values are then weighed against the value of things that consumers must forego if the externalities are to be reduced, such as more comfortable cars or warmer homes. Government officials should then control externalities whenever the benefits of doing so outweigh the costs.

Once the government has determined the optimal level of externality to permit, the economist also assists by designing the most efficient ways of modifying citizens' behavior to achieve the policymaker's goals. Economists usually prefer taxes, auctions, and tradable permits to "command-and-control" regulation, because the former methods help ensure that externalities are mitigated at the lowest possible cost. In the case of pollution, for example, firms that can reduce their own pollution at low cost face strong incentives to do so when monetary penalties or benefits are involved. Under command-and-control regulation, all firms face incentives to achieve only a minimal level of compliance with the law, even if some could reduce pollution further at a very low cost and others pay high costs just to comply. Society could achieve an equal amount of pollution reduction at lower total cost if the firms with high abatement costs could pay the firms with low abatement costs to reduce their pollution by more than the law requires. By pointing out such opportunities to regulators, the economist supposedly earns his keep.

Unfortunately, this approach to externalities, while informed by economic theory, ignores some fundamental economic realities.[8] It ignores whether

8. Readers should not interpret this discussion to mean that cost-benefit analysis of regulation is a bad idea. In the absence of cost-benefit analysis, there is nothing left to guide policymakers

politicians and regulators will actually have the incentive to implement policies resulting in an efficient level of externalities. It also begs the question of whether government officials and their economic consultants can possibly have the requisite knowledge to estimate the "optimal" level of any externality.[9] Consider each issue in turn.

1. Incentives

Until quite recently, it was fashionable for economists to offer their advice to policymakers as if they were addressing philosopher-kings who had every intention of promoting the general welfare. Much popular policy discussion still is conducted in this way. It is assumed that policymakers want to do the "right thing," and any deviations from this norm are treated as special cases of corruption or other moral lapses. If only we could place better people in elected offices and appointed regulatory positions, the reasoning goes, we would get policies that truly reflect the public interest.[10] In this view, the material and nonmaterial incentives facing policymakers and regulators do not normally matter. When "Mr. Smith goes to Washington," he seeks only to serve the public; he seeks neither personal wealth nor the corrupting power to run others' lives as he sees fit.

During the past thirty years, however, "public choice" scholars in economics and political science have demonstrated conclusively what the Founding Fathers knew instinctively: Government leaders respond to political pressures, regardless of the consequences for the "public interest." Government officials do so, not because they are inherently corrupt or evil, but because of the political incentives they face.[11]

On almost any policy issue, a politician's constituency can be divided into two groups of people. On the one hand is a relatively small minority that is greatly affected by the policy decision. In American politics today, such minorities include environmentalists seeking to preserve endangered subspecies of animals, textile firms seeking protection from imports, and various

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but whims and political pressures. Cost-benefit analysis at least forces policymakers to weigh the pros and cons of policy proposals more carefully. Unfortunately, it also gives policymakers the misleading impression that they have sufficient knowledge to make these regulatory decisions in the first place.

9. M. Bruce Johnson, *Land Use Planning and Control by the Federal Government, in* NO MAN IS AN ISLAND 75 (1975).

10. In recent memory, the rhetoric employed by candidate Jerry Brown in the 1992 presidential campaign provides an excellent example of this view. Brown often argued that voters could solve the nation's problems by throwing out "corrupt" officials. *See, e.g.*, Adam Nagourney, *Brown Taps Into Blue-Collar Anger; Strong Showing Possible*, USA TODAY, March 16, 1992 at 3A.

11. For the evolution of these two contrasting views of regulation, see JACK C. HIGH, REGULATION: ECONOMIC THEORY AND HISTORY (1991).

industries seeking government subsidies. These interest groups—or "factions," to borrow James Madison's famous epithet in *The Federalist* No. 10[12]—have strong incentives to spend time and money seeking special treatment from the government. If they succeed, the potential monetary or nonmonetary payoff to each member of the group can be substantial.

On the other hand, the general public usually lacks corresponding incentives to oppose special favors for particular interest groups. The cost of any one subsidy, tariff, or regulation often amounts to only a small amount per person per year when divided among the general public. Even in cases where the cost to the average citizen is much larger than a few dollars, the public has great difficulty organizing itself to oppose special-interest programs. It is much more expensive to organize a large group of people than a small group—especially when the small groups might already be organized, in the form of trade associations, professional groups, or other preexisting entities.[13]

In short, special-interest policies concentrate benefits on relatively few people while dispersing the costs among the general public.[14] Given this result, special interests have much stronger incentives to lobby for special treatment than the general public has to oppose them. When public officials listen for the voice of "the public," the loudest voices they hear often are the ones clamoring for special-interest programs or regulations. In order to "do good"—and, of course, to stay in office—government officials then conclude that they must heed these voices. Officials might not intend to benefit special interests, but the logic and pressures of concentrated benefits and dispersed costs ensure that they will often do so. The more the costs or benefits are dispersed among the general public, the more likely it is that policymakers will face incentives to do what is not in the public interest.

The public has the opportunity to redress its grievances at the polls, but here again, the logic of concentrated benefits and dispersed costs rears its ugly head. For any one individual, the costs of becoming informed and voting are quite substantial. The expected benefits, however, are relatively small because it is quite unlikely that any one individual's vote will be the deciding factor in an election. For members of special-interest groups, though, the logic is reversed.

Consider, for example, a textile worker whose job might be protected by a clothing tariff. The potential payoff associated with learning about a candidate's position on clothing tariffs is quite large. The cost of information is quite low because a textile manufacturer, labor union, or other trusted

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12. JAMES MADISON, No. 10, *in* THE FEDERALIST 129 (Benjamin F. Wright, ed. 1961).

13. ROBERT E. MCCORMICK & ROBERT TOLLISON, POLITICIANS, LEGISLATION, AND THE ECONOMY 17 (1981); MANCUR OLSON, THE RISE AND DECLINE OF NATIONS 41 (1982).

14. *See* George J. Stigler, *The Theory of Economic Regulation*, 2 BELL J. ECON. & MGMT. SCI. 1 (1971).

source can often be counted on to let workers know how a politician stands on import tariffs. Furthermore, peer pressure gives members of special interest groups a better chance of influencing elections. Each union member, for example, knows that he probably will not cast the deciding vote, but each also knows that his group can sway the outcome if all vote together. Each person has an incentive to urge all of his coworkers to the polls. Thus, the logic of concentrated benefits and dispersed costs helps ensure that elections often will fail to undo the special-interest deals struck in the halls of the legislature.

2. Knowledge

For government officials, the knowledge problem might be even more severe than the incentive problem. Even if government leaders sincerely want to do the right thing, they may lack the knowledge required to do so.

In a political era dominated by policy wonks, televised pundits, and sundry other technical experts, the issue is not whether government officials know how to generate and understand data; the policy arena is replete with studies that purport to demonstrate the impact of various policies. Nor is the intelligence of government officials at issue here, for many highly intelligent people serve in government. Rather, the knowledge problem lies in the fact that government officials can never match the knowledge that is dispersed in the minds of millions of producers and consumers in an advanced economy.

At the root of any advanced economic society is the concept that each person is an expert on something. Each possesses knowledge of some "particular circumstances of time and place."[15] Every day people improve their quality of life by combining their own little piece of knowledge with signals from the rest of society that help them understand how their actions will affect everyone else. The phenomenon of dispersed knowledge inevitably frustrates policymakers who genuinely seek to promote the public good because they cannot possibly find out everything they would need to know to make the appropriate policy choices.

Dispersed knowledge makes government officials' jobs difficult enough. To add to this difficulty, much relevant knowledge is tacit.[16] Tacit knowledge is not a knowledge of facts, figures, and formulae but of tastes, feelings, and abilities. Tacit knowledge cannot be articulated to pollsters or statisticians, but it profoundly impacts the complicated tradeoffs that each person is willing to make in regard to externalities.

The issue of secondhand tobacco smoke provides an illuminating example. Putting aside the health effects, which are uncertain, most policy discussion

15. FRIEDRICH HAYEK, *The Use of Knowledge in Society*, *in* INDIVIDUALISM AND ECONOMIC ORDER 80 (1948).

16. MICHAEL POLANYI, THE TACIT DIMENSION 61 (1966).

assumes that secondhand smoke is highly and equally annoying to everyone. If this were true, it might make sense to have a national policy banning smoking in public places. In reality, though, people are heterogeneous, and costs and benefits are highly subjective.[17] Some people dislike secondary smoke, some, such as other smokers, actually like it, and still others do not care. There are even cases of people who quit smoking but like secondary smoke and smokers who do not like it! Yet, even if one could classify everyone into one of these categories, the intensity of annoyance with or affection for secondary smoke cannot easily be measured—nor can the pleasure smokers derive from being permitted to light up in peace. In any given restaurant, the smokers, nonsmokers, employees, and owner all have better knowledge about their relevant likes and dislikes than any regulator could hope to acquire. Therefore, it is more appropriate to permit experimentation tailored to the circumstances in different business establishments and public places rather than establishing one blanket policy for all places.

The conventional regulatory approach to externalities ignores the insuperability of problems created by dispersed and tacit knowledge. If knowledge is dispersed, then government must hire consultants to gather it up. If knowledge is tacit, then we must design better surveys. If people lie, then the government must hire experts who will not be fooled. In short, regulators adopt a "pretense of knowledge"[18] in place of the real thing.

This mindset should alarm anyone seeking genuine solutions to externality problems. The idea that regulators can rationally mitigate externalities once they get better data parallels the more general arguments frequently advanced on behalf of a universally failed economic policy, centralized economic planning, i.e., communism. The would-be social planners suffer from a "fatal conceit"—the hubris that they can rationally assess all problems and then regulate human behavior to generate a social optimum.[19] Centralized economic planning failed in the Soviet Union and Eastern Europe because no dictator or planning board could possibly gather all of the knowledge needed to plan an economy that genuinely responds to consumer desires.[20] Economic dictators pretended to have adequate knowledge to plan society, or they substituted their own value judgments for the will of the people. The history of collectivist economic systems is replete with examples where societies tried a number of approaches but failed to produce a standard of living even

17. JAMES M. BUCHANAN, COST AND CHOICE 41 (1978); Steven C. Littlechild, *The Problem of Social Cost*, *in* NEW DIRECTIONS IN AUSTRIAN ECONOMICS (1978).

18. Friedrich Hayek, Nobel Lecture, *The Pretence of Knowledge*, December 11, 1974, at Stockholm School of Economics.

19. For the origins of the phrase "fatal conceit," see FRIEDRICH HAYEK, THE FATAL CONCEIT (1990).

20. *See* PETER J. BOETTKE, THE POLITICAL ECONOMY OF SOVIET SOCIALISM 23-27 (1990); DON LAVOIE, RIVALRY AND CENTRAL PLANNING 26 (1985).

remotely as successful as that experienced in the Western world. If we genuinely want to solve externality problems, we must find a better model for regulatory policy than the defunct Soviet Union.

C. Externalities and Property Rights

If government regulation is unlikely to solve the problem of externalities, where do we turn? The answer often will be to—not away from—private property rights.

The existence of externalities implies that people are not always held accountable for all of the effects of their actions. "Folk economics," to use Robert Bork's phrase, holds that private property creates externalities because it permits people to put their own selfish interests ahead of those of their fellow citizens. From a property rights perspective, the opposite is the case. Externalities arise because private property rights are poorly defined or not enforced. In such situations, market exchanges of property rights are difficult or impossible, and people are not held accountable for their actions.

Ecologist Garrett Hardin pointed out this problem in his famous description of "The Tragedy of the Commons."[21] "Picture a pasture open to all," Hardin said. When the pasture is open to all, each rancher reaps profit by placing as many cows out to graze as possible. Of course, the decision to pasture another cow soon generates costs; there is less grass for all of the cows to eat, and everyone's herd may be less healthy as a result. The individual rancher, though, does not bear the full costs associated with his decision to add a cow to his herd. Those costs are spread among all of the ranchers.[22]

To see this point more clearly, imagine a community of ten ranchers. A rancher might think he can earn an extra $100 in profit from adding one cow to his herd, but this cow consumes enough grass that every rancher's profit falls by $15. For the individual rancher, it still makes sense to enlarge the herd because the added $100 profit from an additional cow more than offsets the $15 reduction in profits from less healthy cows. For the ten ranchers as a whole, though, one person's decision to add one cow has reduced total profits by $150. In this situation, all ranchers will choose to graze too many cattle, the commons will deteriorate, and no one will make as much profit as they could have if each used the commons more wisely. This situation will persist as long as the pasture remains a commons.

Hardin argued that individuals and society often cultivate moral precepts that prevent people from overusing the commons.[23] Mere moral suasion often is not enough, however. If a sense of ethical duty alone is insufficient

21. Garrett Hardin, *The Tragedy of the Commons*, 162 SCIENCE 1243 (1968).

22. *Id.*

23. *Id.*

to prevent overuse, then government must actively manage the commons to preserve its value. In a number of cases, Hardin opts for government management of the commons through regulation or tax schemes. This is a problematic solution, however, given the incentive and knowledge problems faced by government officials.[24]

There is, however, another solution that generates superior incentives and knowledge to manage the commons wisely: privatize it. As Hardin himself recognized, when the common pasture is divided up into separate plots, each owner directly bears the results of his decision about herd size. If someone grazes more cows than his plot can support, the health and size of his herd suffer. Others, who decide to raise only as many cows as their plots can sustain, have healthier cows and more productive ranching operations. In this way, ranchers who make wise decisions prosper while those who put too many or too few cattle on the land suffer the consequences of their decisions.

In addition to rewarding ranchers for making ecologically and economically sound decisions, privatization of the commons helps create better knowledge. Even if some ranchers are not sure how many cows they should raise, continual experimentation will help them to discover this information. Each plot of land becomes a "controlled experiment" in which the results are not affected by other ranchers' decisions. An individual rancher's decisions affect only his own herd, and the externality problem associated with communal ownership of land is eliminated. Independent judgment, coupled with direct feedback, helps ranchers learn how to best raise cattle. In this way, private property rights benefit not only the ranchers but also everyone in society who buys milk and meat.

This solution to the commons problem illustrates a more general principle: when private property rights are well-defined and enforced, externality problems disappear. Private property prompts people to take all the effects of their actions into account.

Ronald Coase made this point in *The Problem of Social Cost*,[25] one of the articles that helped him to win the 1991 Nobel Prize in Economics. Coase examined, among other examples, the case of a farmer and a rancher. It

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24. In the context of land use regulation, Mark Sagoff shows how government can easily find itself in this position when it defines "the commons" expansively:

> It does not matter . . . that developers own the land on which they wish to build. The argument I shall make does not depend on what a project does to the land it immediately sits upon. It depends on how the project will affect the commons—which includes air and water quality, traffic conditions, vistas, in a word, the public goods we include under the concept of the environment.

Mark Sagoff, *Coming Late to the Commons: Investment Backed Expectations and Land Use Management*, *in* DEVELOPMENT EXPECTATIONS AND THE ZONING POWER: THE CONCEPT OF VESTED RIGHTS 55 (Richard Collins ed., 1992).

25. Ronald H. Coase, *The Problem of Social Cost*, 3 J.L. & ECON. 1 (1960).

should be borne in mind, however, that the lessons learned have applicability to any situation where there are objections to another's use of property.

In Coase's example, straying cattle destroy the farmer's crops—a seemingly clear example of an externality. Coase demonstrated, though, that the rancher and the farmer each have an incentive to eliminate the externality, as long as property rights are well-defined. If the rancher is legally liable for the damage his cattle inflict on the farmer's crops, then the rancher must either pay the farmer to tolerate the damage or pay for a fence. If the rancher is not liable for crops damaged by cattle, then the farmer has an incentive to pay for a fence since it reduces his losses from crop damage.

This situation does not necessarily imply that a fence will be built. The rancher's decision depends on the cost of the fence and the value of the crops destroyed by the cattle. If the value of the destroyed crops exceeds the cost of the fence, then the rancher and farmer each has an incentive to build the fence. Depending on which party is liable for damages—the distribution of property rights—the rancher will build the fence to avoid a lawsuit by the farmer or the farmer will offer to pay for the fence. If the cost of the fence exceeds the value of the crops, then neither the rancher nor the farmer has an incentive to pay for the fence. Depending on the distribution of property rights, either the rancher will compensate the farmer for the crop damages or the farmer will decline to pay for the fence. In this second case, the fence does not get built because it is not worth building. In either case, the externality is "internalized"; the rancher must take into account the effect of his actions on the farmer.

As long as the rancher and farmer know their rights, they can bargain to address the externality problem. They may jointly decide to build a fence, or they may decide the damage is not significant enough to justify the fence. In either case, their negotiation and bargaining have generated new knowledge: knowledge of whether the fence—or, to give another example in a different context, an anti-air-pollution device—is worth the cost.

The situation is quite different if the farmer and rancher (or polluter and polluted) do not know the distribution of rights. If property rights are unclear, each person naturally will claim the property right, and the farmer and the rancher will not be able to trade until reaching an agreement that allocates property rights. This scenario might sound most plausible in a frontier situation when people are first establishing claims to previously unowned property.[26] In the modern era, though, government activism has become a

26. John Locke argued that people should be allowed to claim unowned property by mixing their labor with it, as long as they leave enough for others who come after them. JOHN LOCKE, OF CIVIL GOVERNMENT ¶ 27 (1690). Epstein argues that in the modern world, this means that people should be able to claim unowned property for their own use as long as their use of the property increases the size of the "social pie" by moving the property from a lower valued use to a higher valued use. EPSTEIN, *supra* note 1.

major influence that clouds the definition of property rights. If people know that they can deprive others of their ownership rights through an effective lobbying campaign or a clever political deal, everyone's property rights become less secure. In this situation, people have less incentive to mitigate externalities through trade because they can use the political process to acquire others' property without paying for it.

III. THE RATIONALE FOR (COMPENSATED) TAKINGS

A. Transaction Costs and Collective Action

Thus far, the discussion appears to demonstrate that the government's role in mitigating externality problems is merely to ensure that private property rights are well-defined and enforced. In such a world, takings of private property to control externalities would be unnecessary. Since there would be no need for the government to pay compensation for property that it did not take, the Fifth Amendment's Takings Clause would be irrelevant. In reality, however, the system of private property rights does not always work as well as we would like.

In particular, when large numbers of people must bargain with each other the transaction costs associated with purely voluntary efforts might be excessive. Economists define transaction costs as the time and expense of finding trading partners, bargaining, and enforcing agreements. The example of the rancher and the farmer illustrates how transaction costs might make it difficult to resolve externality issues through voluntary trade.

Negotiations are easy to envision if there is one rancher and only a few large farms. But suppose that the ranch is very large and the cattle roam onto a hundred different nearby farms. This situation can create barriers to trade, regardless of whether the rancher is liable for the damage caused by straying cows.

If the rancher is liable, then the farmers need some way of compelling payment for damages. Each farmer could sue the rancher, but the costs of bringing suit and collecting on a hundred claims could well consume most of the compensation. Alternatively, one farmer could sue the rancher, and the rancher then would compensate all the farmers to avoid future lawsuits. In this case, though, every farmer knows that he will be compensated, even if another farmer brings the lawsuit. Therefore, each farmer will be tempted to "free ride" on some other farmer's lawsuit. If the incentive to free ride is strong, no one might ever bring the suit. A class action suit brought by an attorney on a contingency fee basis is a possibility. In this case, though, someone must bear the transaction costs of verifying and aggregating the farmers' damage claims and ensuring that each farmer is fully compensated by the settlement or court judgment. Under all of these scenarios, transaction costs could prevent "internalization" of the externality.

Even if the rancher is not liable, there are substantial transaction cost problems. The farmers might rather pay for a fence than suffer the damage from roaming cattle. If so, there are a host of free-rider problems. Somehow the farmers need to organize to get the fence built and negotiate apportionment of the costs. Individuals might well have incentives to hold out for a low payment, even if they receive value from the fence. If the bargaining and holdout problems are severe enough, the fence might not get built even though the value of the crops saved might exceed the cost of the fence. Or, to give another example, an anti-air-pollution device might not be installed, even if the value of the unpolluted air exceeds the cost of the device.

B. The Government's Role

In the presence of transaction costs, it might be more cost-effective for the farmers to use the local government as their agent rather than establishing a new cooperative or collective organization to bargain with the rancher or build the fence. Even if government intervention is not the option with the lowest transaction costs, history suggests that various groups expect the government to do something when transaction costs accompany externalities. In these cases, it is worth questioning the types of rules that should guide the government's activities.

Only transaction costs can legitimate the government's role. Accordingly, the government needs to confine its actions to those that will reduce transaction costs. The government's role should not be to impose its own or its experts' views on the farmers and ranchers, but rather to help them strike a deal. The particulars of the solution will depend on the initial allocation of property rights. If the rancher is liable for damage caused by cattle, then the rancher will have to reduce the size of the herd, build fences, or compensate the farmers. If the rancher is not liable, then the farmers will have to put up with the damage or help pay for the fences. In either case, the government's role is to reduce the transaction costs that hamper agreement among the farmers and between the farmers and the rancher—or between industry and environmentalists.

It is important to recognize that, as reducer of transaction costs, the government does not bring to the table any new knowledge or superior insight that will help the farmers and the rancher—or the CEO and the Sierra Club—to cut a deal. In fact, compared to the farmers and the rancher, the government has inferior knowledge of the preferences of the farmers, the value the farmers place on the destroyed crops, the value the rancher places on cattle, and the cost of fences. Therefore, if the government's proper role is reducing transaction costs, it cannot assume that it has full knowledge of these other things. A bargaining and exchange process is necessary to determine whether the fence is worth its cost. If public policy truly is to promote the solution that maximizes value for all parties, the government cannot merely

mandate a fence, nor can it calculate an optimal tax on wandering cows. In the absence of negotiation and trade, the government lacks the knowledge to determine whether the mitigation of crop damage—or pollution—is worth the cost.[27]

Any government intervention must permit both parties to decide whether the benefits are worth the costs. If government proposes requiring fences even though the rancher is not liable, the government also must propose a way that the farmers will pay for the fence or compensate the rancher for the cost. If the rancher is liable but the government proposes unlimited cattle wandering, it must also propose a way that the rancher will compensate the farmers for the value of the destroyed crops. In this way, the people receiving the benefit of any proposed regulation are also presented with a bill for the costs and ideally they—not government officials—would decide whether the benefits of the proposed regulation or other government action are worth the costs.

The Takings Clause approximates this type of system, although not perfectly. Under the Clause, legislators and regulators are permitted to impose a solution to mitigate externalities. The people affected by the chosen solution do not usually have the option of rejecting it directly. But to the extent that the government curtails private property rights, the property owners must be compensated, and general taxation provides the funds for the compensation. Politicians must then weigh the perceived benefits of regulation against the cost in tax dollars. Instead of getting something for "free," the public would ideally know that the decision to regulate carries with it a tax-cost. At some point, politicians who impose too many regulations that are not worth the cost will find their popularity dwindling because of the excessive tax burden that accompanies the excessive regulation.[28]

C. Problems with the Takings Clause

Despite these benefits, the Takings Clause is not a panacea. Policymakers who compensate property owners with tax dollars still face incentive and knowledge problems that will diminish the quality of their decisions.

The government's decision to spend tax dollars still is subject to the logic of concentrated benefits and dispersed costs. In many cases, regulation that impinges on private property rights will confer substantial benefits upon some narrow interest group. Thus, that group has strong incentives to lobby for the measure. The general public, though, pays for the regulation through taxes,

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27. Note that the tax revenues extracted from one party must be paid to the other party to achieve compensation. If the government taxes the rancher and then spends the money on something else, the farmers may not receive compensation.

28. In a world of mobile financial capital and people, governments might have stronger incentives to adopt the levels of regulation and taxation that actually reflect popular preferences. *See* DWIGHT LEE & RICHARD MCKENZIE, QUICKSILVER CAPITAL (1991).

and the burden of taxation is spread across the public at large. Individual citizens, therefore, have relatively weak incentives to lobby against any one regulatory initiative. Indeed, the average citizen has much less incentive to lobby against a particular regulation than the average property owner faced with the prospect of an uncompensated taking. Therefore, even if the government must pay when it takes, public officials will face strong incentives to benefit small factions at the expense of the public.

Even if policymakers want to do the right thing, they still face the "knowledge problem" of determining the public benefits of regulation and weighing them against the costs. The government cannot "know" these benefits and costs independent of market transactions, and it will be difficult to discern what market participants would have chosen to do if government had not effected a taking. In many cases, tax revenues are general revenues. Sometimes specific tax revenues are earmarked for specific purposes, but they rarely are earmarked to compensate the victims of specific regulatory takings. Voters "buy" a bundle of goods and services from their government, and the voting mechanism does not usually permit them to give government officials detailed instructions on how the money should be spent. Policymakers receive a pot of revenues and a great deal of discretion to divide revenues among various projects in the bundle. As a result, it is not clear how much voters are willing to pay as compensation for a regulatory taking. Therefore, in any given case, it will not be clear whether a proposed regulation is worth the cost.

These drawbacks should not, of course, be construed as arguments against compensation for regulatory takings. To the contrary, they suggest that even a government that must pay when it takes will still have a bias toward taking too much. A vigorous interpretation of the Takings Clause would at least force policymakers to recognize that every regulation imposes costs. Unlike cost-benefit studies, which can often be manipulated to justify proposed regulations, the Takings Clause requires that the government put real dollars on the table in exchange for public benefits. An expansive interpretation of the Takings Clause would, therefore, help move the level of regulation closer to that which the public as a whole is actually willing to bear.

IV. CONCLUSION

Our society needs private property rights because economic activity is too complex to be planned and orchestrated by a dictator, a committee of experts, or even an electronic town hall. Private property rights divide decision making about the use of resources among millions of independent decision-makers, and these rights install accountability for decisions. As a result, private property permits an advanced economy to prosper through a complex division of labor that could not be rationally planned by anyone.

In much popular discussion, private property is considered a barrier to the wise use of resources because individuals making independent decisions about the use of property are supposedly accountable only to themselves. However, in a free society, nothing could be further from the truth. The opportunity to earn income from property makes the owner accountable to many other individuals in society. If the owner does not use his property to produce something of value to others, his earnings will be diminished. This profit incentive applies not just in the short run but also over the long term because asset markets continually reward people who find ways to enhance the value of their property to other people. In a system of private property, the owners are responsible to the wills of millions of customers rather than a handful of regulators or interest groups.

Given these realities, the Takings Clause helps discipline public decisions in cases where collective action through government is necessary. By forcing the government to pay when it takes, the clause forces government to weigh the costs of regulation against the benefits. Due to the nature of governmental processes, this weighing will not be perfect, and the government still may choose to regulate in cases when the cost to taxpayers outweighs the benefits of regulation. Nevertheless, the Takings Clause creates a rough screening process that can help discourage some of the least justifiable regulatory initiatives.